

**Amendments to the Claims:** This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Currently Amended) A system for transmitting aircraft operational data from an aircraft, comprising:

one or more black boxes ~~that can store~~ storing the aircraft operational data,

one or more transmitters ~~that can wirelessly transmitting~~ the stored aircraft operational data from the aircraft; and

one or more sensors, at least one of the sensors ~~being able to enable~~ enabling the wireless transmission of the aircraft operational data by the one or more transmitters upon sensing the an occurrence of an event;

*C* ~~wherein each sensor provides an output signal only when the sensor detects an operating parameter that is outside a normal operational range.~~ the event is transmitted/reported *ia*  
wherein each sensor provides an output signal only when the sensor detects an operating parameter that is outside a normal operational range. *A*

2. (Original) The system as claimed in claim 1, further comprising a processor/modem that receives aircraft operational data from the black box, compresses the aircraft operational data, and sends the compressed aircraft operational data to the one or more transmitters for transmission.

*Pl cont.* 3. (Original) The system as claimed in claim 2, further comprising a bus to which the black box, the processor and the one or more transmitters are connected.

4. (Original) The system as claimed in claim 1, further comprising a ground-based receiver that receives the wirelessly transmitted aircraft operational data.

5. (Original) The system as claimed in claim 1, further comprising a satellite receiver that receives the wirelessly transmitted aircraft operational data.

6. (Original) The system as claimed in claim 1, wherein the one or more sensors includes a plurality of sensors, each of the plurality of sensors being able to enable the wireless transmission of the aircraft operational data by the one or more transmitters upon sensing the occurrence of an event.

*10/* 7. (Original) The system as claimed in claim 1, wherein the one or more transmitters includes a plurality of transmitters and the one or more sensors includes a plurality of sensors, each of the plurality of sensors being able to enable the wireless transmission of the aircraft operational data by the plurality of transmitters upon sensing the occurrence of a predetermined event.

*11/* 8. (Original) The system as claimed in claim 1, wherein the one or more black boxes includes a plurality of black boxes, each of the black boxes being able to store at least a part of the aircraft operational data.

12<sup>g</sup>. (Original) The system as claimed in claim 1, wherein the black box is a flight data recorder.

13<sup>10</sup>. (Original) The system as claimed in claim 1, wherein the black box is a cockpit voice recorder.

14<sup>11</sup>. (Original) The system as claimed in claim 1, wherein the black box is a flight data recorder and a cockpit voice recorder.

15<sup>12</sup>. (Original) The system as claimed in claim 1, wherein the one or more transmitters includes a plurality of transmitters and wherein each of the plurality of transmitters wirelessly transmits a portion of the aircraft operational data when enabled by the sensor.

16<sup>13</sup>. (Original) The system as claimed in claim 15<sup>15</sup>, wherein each of the plurality of transmitters transmits on a different frequency.

7<sup>14</sup>. (Original) The system as claimed in claim 6, wherein the aircraft operational data includes:

sensor readings and control signals.

8<sup>15</sup>. (Original) The system as claimed in claim 6, wherein the aircraft operational data includes voice signals.

9<sup>16</sup>. (Original) The system as claimed in claim 8<sup>15</sup>, wherein the aircraft operational data includes video signals.

18<sup>17</sup>. (Currently Amended) A system for transmitting aircraft operational data from an aircraft, comprising:

a flight data recorder ~~that can store~~ storing a first set of the aircraft operational data;

a cockpit voice recorder ~~that can store~~ storing a second set of the aircraft operational data;

one or more transmitters ~~that can~~ wirelessly transmitting the first and second set of the aircraft operational data; and

one or more sensors, each sensor ~~being able to enable~~ enabling the wireless transmission of the first and second set of aircraft operational data upon sensing the an occurrence of an event;

the event is transmitted/reported a  
wherein ~~each sensor provides an output signal only when the sensor detects an~~ operating parameter that is outside a normal operational range. ^

19<sup>18</sup>. (Original) The system as claimed in claim 18<sup>18</sup>, further comprising a processor/modem that receives the first and second set of aircraft operational data from the flight data recorder and from the cockpit voice recorder, respectively, compresses the first and second set of aircraft operational data, and sends the compressed first and second set of aircraft operational data to the one or more transmitters for transmission.

20<sup>18</sup>. (Original) The system as claimed in claim 17, wherein the one or more sensors includes a plurality of sensors, each of the plurality of sensors being able to enable the wireless transmission of at least a portion of the first and second set of aircraft operational data by the one or more transmitters upon sensing the occurrence of an event.

24<sup>18</sup>. (Original) The system as claimed in claim 17, wherein the one or more transmitters includes a plurality of transmitters and the one or more sensors includes a plurality of sensors, each of the plurality of sensors being able to enable the wireless transmission of the first and second set of aircraft operational data by the plurality of transmitters.

25<sup>18</sup>. (Previously Presented) The system as claimed in claim 17, further comprising a ground-based receiver that receives the wirelessly transmitted aircraft operational data.

26<sup>18</sup>. (Previously Presented) The system as claimed in claim 17, further comprising a satellite receiver that receives the wirelessly transmitted formatted aircraft operational data.

21<sup>20</sup>. (Original) The system as claimed in claim 18, wherein the aircraft operational data includes:

sensor readings and control signals.

22<sup>20</sup>. (Original) The system as claimed in claim 18, wherein the aircraft operational data includes voice signals.

23<sup>22</sup>. (Original) The system as claimed in claim 24, wherein the aircraft operational data includes video signals.

28<sup>28</sup>. (Currently Amended) A method of transmitting aircraft operational data from an aircraft, comprising the steps of:

storing aircraft operational data in a black box;

C  
sensing, by at least one sensor, the occurrence of an abnormal operational event in the aircraft, wherein the ~~at least one sensor provides an output signal only when the sensor detects an operating parameter that is outside a normal operational range;~~ and event is transmitted/reported

wirelessly transmitting the stored aircraft operational data upon sensing the occurrence of the abnormal operational event.

29<sup>28</sup>. (Original) The method as claimed in claim 26, further comprising the step of compressing the aircraft operational data before performing the step of wirelessly transmitting the data.

31<sup>28</sup>. (Original) The method as claimed in claim 26, further comprising the step of compressing the stored aircraft operational data.

32<sup>28</sup>. (Original) The method as claimed in claim 26, wherein the stored aircraft operational data is transmitted with a plurality of transmitters.

30<sup>29</sup> 30. (Original) The method as claimed in claim 27, wherein the stored aircraft operational data is transmitted with a plurality of transmitters.

33<sup>28</sup> 31. (Original) The method as claimed in claim 28, further comprising the step of receiving the wirelessly transmitted aircraft operational data with a ground-based receiver.

34<sup>28</sup> 32. (Original) The method as claimed in claim 28, further comprising the step of receiving the wirelessly transmitted aircraft operational data with a satellite receiver.

35<sup>28</sup> 33. (Original) The method as claimed in claim 28, wherein the aircraft operational data includes:

sensor readings and control signals.

36<sup>28</sup> 34. (Original) The method as claimed in claim 28, wherein the aircraft operational data includes voice signals.

37<sup>36</sup> 35. (Original) The method as claimed in claim 34, wherein the aircraft operational data includes video signals.

39<sup>36</sup> 36. (Currently Amended) A method of transmitting aircraft operational data from an aircraft, comprising the steps of:

storing a first set of the aircraft operational data in a flight data recorder;

storing a second set of the aircraft operational data in a cockpit voice recorder;

c sensing, by at least one sensor, the occurrence of an abnormal operational event in the aircraft, wherein the at least one sensor provides an output signal only when the sensor detects an operating parameter that is outside a normal operational range, and <sup>event is transmitted / reported</sup>

wirelessly transmitting the first and second set of the aircraft operational data upon sensing the occurrence of the abnormal operational event.

40<sup>39</sup> 37. (Original) The method as claimed in claim 36, further comprising the step of compressing the first and second sets of the aircraft operational data before performing the step of wirelessly transmitting the data.

41<sup>39</sup> 38. (Original) The method as claimed in claim 36, wherein the first and second set of the aircraft operational data are transmitted with a plurality of transmitters.

43<sup>39</sup> 39. (Currently Amended) A system for transmitting aircraft operational data from an aircraft, comprising:

a black box ~~that can store~~ storing the aircraft operational data,

a processor/modem ~~that receives~~ receiving the aircraft operational data from the black box and ~~compresses~~ compressing the aircraft operational data;

a transmitter ~~that can~~ wirelessly transmitting the compressed aircraft operational data from the aircraft; and

a sensor ~~that enables~~ enabling the wireless transmission of the compressed aircraft operational data by the transmitter from the aircraft upon sensing the an occurrence of an event;

*event is transmitted / reported a*  
~~wherein the sensor provides an output signal only when the sensor detects an operating parameter that is outside a normal operational range.~~

*44* 40. (Original) The system as claimed in claim 39, further comprising additional black boxes, each of the black boxes being able to store at least part of the aircraft operational data.

*45* 41. (Original) The system as claimed in claim 39, further comprising additional transmitters, each of the transmitters being able to wirelessly transmit at least part of the aircraft operational data.

*46* 42. (Original) The system as claimed in claim 39, further comprising additional sensors, each of the sensors being able to enable the wireless transmission of the aircraft operational data by the transmitter upon sensing the occurrence of the predetermined event.

*47* 43. (Original) The system as claimed in claim 39, further comprising:

additional transmitters, each of the transmitters being able to wirelessly transmit the stored aircraft operational data from the aircraft; and

additional sensors, each of the sensors being able to enable the wireless transmission of the aircraft operational data by the transmitters upon sensing the occurrence of the predetermined event.

*49* 44. (Currently Amended) A system for transmitting aircraft operational data from an aircraft, comprising:

a flight data recorder ~~that can store~~ storing a first set of the aircraft operational data;

a cockpit voice recorder ~~that can store~~ storing a second set of the aircraft operational data;

a processor ~~that receives~~ receiving the first and second set of aircraft operational data from the flight data recorder and from the cockpit voice recorder, respectively, and compressing the first and second set of aircraft operational data;

a transmitter ~~that can~~ wirelessly transmitting the compressed first and second set of the aircraft operational data; and

a sensor ~~that enables~~ enabling the wireless transmission of the compressed first and second set of aircraft operational data upon sensing the an occurrence of an event;

*event is transmitted / reported a*  
~~wherein the sensor provides an output signal only when the sensor detects an operating parameter that is outside a normal operational range.~~

<sup>51</sup>48. (Currently Amended) A method of transmitting aircraft operational data from an aircraft, comprising the steps of:

storing aircraft operational data in a black box;

compressing the aircraft operational data;

sensing, by at least one sensor, the an occurrence of an abnormal operational event in the aircraft wherein; and

wirelessly transmitting the compressed aircraft operational data upon sensing the occurrence of the abnormal operational event;

<sup>51</sup>  
~~the event is transmitted / reported~~ <sup>a</sup>  
~~each of the at least one sensor provides an output signal only when the sensor detects~~  
an operating parameter that is outside a normal operational range. <sup>Λ</sup>

<sup>52</sup>46. (Original) The method as claimed in claim <sup>51</sup>48, further comprising the step of receiving the wirelessly transmitted aircraft operational data with a ground-based receiver.

<sup>53</sup>47. (Original) The method as claimed in claim <sup>51</sup>48, further comprising the step of receiving the wirelessly transmitted aircraft operational data with a satellite receiver.

<sup>55</sup>48. (Currently Amended) A source of operational data from an aircraft, comprising:  
a transmitter; and

one or more sensors disposed on the aircraft wherein the transmitter ~~can~~ transmits operational data from the aircraft in response to the detection of an abnormal operating event by one of the sensors;

<sup>51</sup>  
~~the event is transmitted / reported~~ <sup>a</sup>  
~~wherein each sensor provides an output signal only when the sensor detects an~~  
operating parameter that is outside a normal operational range. <sup>Λ</sup>

<sup>17</sup>49. (Currently Amended) The system has claimed in claim 1, wherein at least one of the one or more transmitters uses burst transmission techniques.

<sup>27</sup>50. (Previously Presented) The system as claimed in claim <sup>18</sup>27, wherein at least one of the one or more transmitters uses burst transmission techniques.

<sup>36</sup>51. (Previously Presented) The method as claimed in claim <sup>28</sup>36, wherein the step of wirelessly transmitting the stored aircraft operational data is performed using burst transmission techniques.

<sup>42</sup>52. (Previously Presented) The method as claimed in claim <sup>39</sup>42, wherein the step of wirelessly transmitting the stored aircraft operational data is performed using burst transmission techniques.

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*could.*  
<sup>48</sup> ~~53~~. (Previously Presented) The system as claimed in claim <sup>43</sup>~~38~~, wherein the transmitter can wirelessly transmit the compressed aircraft operational data from the aircraft using burst transmission techniques.

<sup>50</sup> ~~54~~. (Previously Presented) The system as claimed in claim <sup>49</sup>~~44~~, wherein the transmitter transmits using burst transmission techniques.

<sup>54</sup> ~~55~~. (Previously Presented) The method as claimed in claim <sup>51</sup>~~48~~, wherein the step of wirelessly transmitting the compressed aircraft operational data is performed using burst transmission techniques.